

ROUNDTABLE TOPICS DISCUSSION SUMMARY
FROM DECEMBER 2009 IOWA COUNTY ENGINEERS CONFERENCE

Recorders:

Group 1: Bob Butin, District 1

Group 2: Bob Welper, District 2

Group 3: Brian Catus, Local Systems

Group 4: Vince Ehlert, District 4

Group 5: Jim Armstrong, District 5

Group 6: Kent Ellis, District 6

Question No. 1 HMA/PCC Paving:

- a. Problems with surface degradation or spalling.
- b. Anyone using geosynthetic fabric/mats under PCC/HMA overlays?
- c. What types of lab facilities/equipment do counties have? (sieves, beams, soil testing?)

Group 1

1a. All counties had experienced surface degradation & spalling.

1b. Davis County indicated that they have used some geo-fabric/mats. The fabric seemed to make the recycling contractors nervous. Davis County indicated that the joints still eventually reflect thru but felt that the fabric helped to reduce movement and helped to reduce the width of the joints. Cerro Gordo County has used fabric over the longitudinal joints created by widening units. The joints still reflected thru over time. Buchanan County thought the fabric slowed reflective cracking. Marshall County thought it did not do any good. Allamakee County didn't think the cost of the fabric was justified and they would rather spend the funds on thickening the HMA. Due to the popularity of cold-in-place recycling/HMA resurfacing projects, fabric use has declined.

1c. Winnebago County indicated that they previously owned their own testing equipment but not anymore.

Group 2

1a. Problems with surface degradation or spalling: Van Buren and Lee Counties had HMA projects with a "Swiss Cheese" look. The aggregate appeared to "dissolve" and left voids. Had to slurry seal surface. Limestone was used in these counties. Another county had a similar experience, but river rock was used there.

1b. Anyone using geosynthetic fabric/mats under PCC/HMA overlays: One county said they did it in small areas, but noted they cannot then recycle the HMA overlay. It was only done for HMA on HMA, not HMA on PCC.

1c. What types of lab facilities/equipment do counties have: Most have equipment for making/breaking PCC beams and for aggregate gradations. None had any soil testing equipment. Some still had lab trailers, but most got rid of them.

Group 4

We mentioned that Cass Co. had some problem with surface degradation on a project this last construction season.

Geo mat was used in the past in District 4 to reduce random cracking, but no one was using it now; too expensive. We did notice that milling was not a problem like was expected.

Only one county did not have a lab. Most counties were well equipped for testing. We reminded them that IDOT will check equipment every 1 or 2 years if asked.

Group 5

1.a. Pocahontas County had a route that was spalling and had surface degradation. Although Pocahontas may have thought the route was too far gone they did a slurry seal and crack sealing to buy some time. Keokuk County had pcc over vibrated during construction and ended up with lots of spalling.

1.b. Linn County tried fabrics and mats under PCC/HMA overlays and found out they just don't work. Kossuth County tried fabric in the 90's over cracks and couldn't tell a difference as they don't think it helped the reflective cracking. Linn County also tried petromat over cracks and the cracks came back through.

1.c. Most Counties have sieves. Keokuk County used to have a portable lab but it fell apart so they built a new facility at a maintenance shed. Most have a fixed up room for a lab.

Group 6

1a.

Clinton Co: No spalling in new PCC, get occasional random cracks. Minor issues with segregation in HMA (think it is related to stockpile issues).

Jasper Co: No degregation issues, no spalling issues.

1b.

Clinton Co: No

Jasper Co: No

1c.

Clinton Co: Have sieves/run gradations; beam breaker for concrete strength; all else pay DOT to perform testing.

Jasper Co: Same as Clinton Co.

Question No. 2 Road Maintenance:

- d. "Minimum maintenance" roads (Level B & C Policies) – anyone prohibit residences? Any have residences on Level B & C roads? How do they handle?
- e. Maintenance levels on "minimum maintenance" Level B & Level C roads (Any ditch cleaning or brush removal?)
- f. Maintenance Practices:
 - 1. Ideas that are working:
timber bridge replacements, resurfacing, rock road maintenance/restoration, eliminating excess signing, safety rumble strips, public relations (news letter?)
 - 2. Problem areas:
brush control, access control, property owner cooperation with road maintenance (?), collecting damages from errant motorists

- g. Dust Control – any counties have a program besides what is placed at residences? Types of products used, how much is spent, how many miles? How selected? How many times are roads treated?

Group 1

2. d. & e. Buchanan County does not plow snow on Level B or C roads. Grundy County use to put up signs that said “No Winter Maintenance”. Some counties do have residents that live on Level B or C roads. In some instances residents live there year round and in other instances they are just seasonal residents (e.g. hunters in cabins). If residents request rock, some counties deliver the rock for the residents to spread. Marshall County does not have any Level B roads but has several Level C roads (approx 5 miles). Cerro Gordo County has 1 Level C road. Marshall County will put up a gate but not maintain the gate. Marshall County will blade Level C roads a maximum of twice a year. Buchanan County has numerous Level B roads (approx 25 miles) and about 4 Level C roads. They clean some ditches on these roads each year and their goal is to have them all done on a 4-year cycle.

2.f. Winnebago and Buchanan Counties both indicated that they have had some non-typical timber bridge replacement projects. Buchanan County indicated that they have done about 15 rail car projects where Dr. Klaiber has been involved. Many of the rail cars have been 68’ long. Some have been welded and lengthened to 75’. Buchanan County has done some 3-span projects with 89’ long rail cars. Buchanan County has sometimes utilized Floyd County’s pile driving equipment. Railing typically consists of tubular steel posts that have been welded on. Previous crash data is analyzed and documented. After field reviewing a rail car bridge replacement project(s), the Davis County Board of Supervisors concluded that these types of projects were too labor intensive. Buchanan County indicated that they have utilized products produced by <http://www.gcswall.com/> on their rail car projects. They also made reference to: <http://www.defiance-county.com/engineer/GRS.htm>

It was indicated that SIMS was the new bridge inspection system currently being developed. IIW from Dubuque in consultation with Dr. Klaiber currently inspect the rail car structures for Buchanan County.

Most counties indicated that they strive not to put up excessive signage because it tends to foster disrespect for other signs that are clearly necessary. Greene County mentioned that they have experienced problems with cities with less than 500 population installing too many signs. Cerro Gordo County indicated that the new MUTCD will require yield or stop signs at passive RR crossings. It was brought up that the RR would be responsible for the cross bucks and signage within their RR right-of-way and the county would be responsible for advance warning signs.

2.g. No discussion.

Group 2

2d. One county said they had 4 or 5 B and 2 C roads with someone living on a C road. Another county said they had 30 B and 10 C roads with 14 living on the Bs and 1 living on a C. Several counties noted they were concerned about lawsuits due to (lack of) fire

protection and ambulance service. 911 addresses were either clumped on one post at the end of the road and distributed to each resident entrance.

2e. Those that spoke up said residents on the B&C roads are responsible for maintaining them.

2f. This became a discussion of weight embargoes. The main topic was when an “implement of husbandry” can be overweight. Consensus was if the implement is on a trailer pulled by a tractor, it is ok. If it is pulled by anything else, it can be overweight.

2g. Some do it, some don’t. County policies vary widely. Some routinely control dust on haul roads or detours. Some routinely control dust past rural cemeteries. Everyone agreed RAP does not work well for dust control.

Group 4

Level B roads are generally bladed prior to planting and prior to harvest, not much more than that. No one was doing any maintenance on Level Cs. Most of the counties only rock a B if owner pays for it. No one mentioned prohibiting the establishment of residences on Level Bs or Cs. Most encouraged Owners to pay 50% of the expense to convert from a B to A level.

One county had a resident on a B route and has been treating it like an A. No one else wanted any part of that. Some *may* add gravel, but not as policy. Most require a petition to the board and also require a 50/50 split on expenses for improvements. Very little ditch cleaning or brush removal is performed on Bs, hard enough keeping up with the As. Some counties are re-investigating their bus school stop ahead signs in hopes of no longer needing them. All counties require board action to place or remove stop signs.

Not much was mentioned regarding timber bridges. Most try to replace with concrete structures. Lynn Co. was mentioned as one that still builds new timber structures.

Contact them for a HS 20 design.

4 counties have the separate brush control fund. Mostly try to accomplish cutting in winter on the A routes. Only cut brush in summer if a sight distance problem exists. Make sure brush cutters are trained.

Dust control is placed by Johnson county for routes exceeding 150 VPD in front of residents and entire route is done when VPD exceeds 250.

3 other counties pay for detours and other special circumstances.

Most just allow owner to have it placed by some approved vendor.

DNR may require county to place dust control if a county facility (such as a county park) is determined to be the generator.

Group 5

2.d. Pocahontas County does not prohibit residences on Level B or C roads but if there is a hog lot that has come in the Board of Supervisors will not change the road back to a Level A just because of a hog lot. Linn County prohibits residences by not issuing a permit for that land use on a Level B or C road. Linn County only blades Level B roads twice a year. Lucas County has allowed residences on Level B roads but does not recommend it. Linn and Lucas County allow property owners to rock but make sure they

know the maintenance level of service. Washington County does not prohibit residences but explains the level of service.

2.e. Keokuk County has narrow roads so ditching not done as the road is the ditch. Level A roads done as a priority for ditching and brush cutting and budget does not allow brush cutting on Level B or C roads. Also culverts not a priority on Level B or C roads but worked in. Miles of Level B roads vary from 4 miles to over 100 for Counties in Group 5. In Linn County the Board of Supervisors have to approve culvert replacement so it slows the process down. In Calhoun County there are only 5 miles of Dirt so there is no plowing and no snow removal signs are put up.

2.f.1. For smaller watersheds in Keokuk County corrugated metal pipe of multiplate structures are being put in and the County has started painting edge lines on a 2 year cycle. Linn County doesn't paint all roads but just higher traffic roads. Lucas County paint edge lines near bridges and curves.

2. Problem Areas: Brush control on back burner in Keokuk County and delegated to blade operator. Brush control is usually winter work. Most Counties mow only shoulders and a little foreslope. Access – some install and charge for the pipe. Some deliver pipe. Some permit and inspect only.

2.g. Keokuk County has 5 Rock Quarries so haul roads are treated with dust control in front of residences and paid for by the County.

Group 6

2d.

Clinton Co: Both Level B and Level C policies; use amended form from Service Bureau example; zoning requires adequate public facilities; currently in litigation over a Level B road that a house was built adjacent to- county tried to vacate road- homeowner filed damages.

Palo Alto Co: Ordinance doesn't forbid building but if the owner wants service upgrades then they pay half of costs (part of ordinance).

Jasper Co: Same as Palo Alto Co. except it is part of zoning requirements.

2e.

Clinton Co: Has done brush removal but no ditch cleaning; Have total of 1.5 to 2.0 miles total of Level B roads; based on litigation, unless you classify a roadway as something different, the service level is considered Level A.

Palo Alto Co: Evaluates case by case basis.

Clark Co: No Level B classified roads, but have lots of dirt roads- they will rock in roads to a certain point; county does work upon request and as time and manpower allows; Road Foreman wants to get Level B ordinance and post signs but Engineer has resisted due to extra costs for signs/etc.

Larry Jesse: Noted that posting signs and having ordinances help limit liability.

2f.1

Clinton Co: Can't see how eliminating signing is an option; have tried rumble stripes- helps to make markings more visible when it rains.

Palo Alto Co: Read an article a while back that said uncontrolled intersections are actually safer than posting Stop Signs- reviewed intersections to try to eliminate some stop signs and ended up posting five more than they originally had.

2f.2

Clinton Co: Property entrance construction- two years ago started to require permit to modify entrances (\$250 permit fee) and then build at county cost but owner pays for pipe- costs County over \$100,000 annually plus maintenance costs; going to talk to Board about charging a \$50 permit fee but make owner pay for construction/maintenance costs; Concerns of bridges for landowner access that county maintains- had a bridge go out and had to pay landowner for damages to their equipment when bridge failed.

Jasper Co: Charge \$50 for permit, County reviews location, then Landowner pays and builds everything (from the ditch back to ROW), County maintains pipe but does not rock driveways.

Delaware Co (former engineer Mark Nahra): Requires that drives be 150' from intersections; had lots more illegal driveways going in after the county stopped paying for the work.

Woodbury Co: County builds and rocks driveways if there is a house.

Jasper Co: Have problems with illegal driveways; removed two driveways that weren't permitted (culvert didn't comply or there were site distance issues); they do not charge for driveway removal costs.

Palo Alto Co: Maintain drives once they are permitted; Charge \$450 for 24' top-increase by \$150 for each additional 10' of width; Restrictions for distance from intersections?- get ordinance

?? Co: Once a driveway is put in, who owns it? A renter put in a driveway on their own, then left property and took driveway out, now new renter wants driveway put back in where it was before- consensus in room that only landowner can request driveways.

2g.

Clinton Co: Permit process (no charge for permit) but landowner pays for work; Use Calcium Chloride or tree sap- no glycerin; county applies at one location- church located on gravel road.

General Discussion: Magnesium Chloride- works good in combination with tree sap. Glycerin- DNR told Todd it can't be used; Mark Nahra had used it on a quarry road but it didn't last (2 months); Dark in color (bluish/black)- they use a lot of it in North and South Dakota.

How many pay for it?- pay for haul roads and detours.

Plymouth Co: Applies/pays on routes with 200+ vehicles per day.

Question No. 3 General Topics:

- h. Random Drug Testing: What's your policy when an operator tests positive and can't use CDL until after doing counseling and getting a release?
- i. Methods to inform taxpayers of funding shortfalls?

Group 1 Other topics: Buchanan County said they are experiencing more difficulty than ever before in trying to satisfy all the environmental project aspects in order to obtain

NEPA Clearance so they can begin to acquire right-of-way. On a recent project, they are now being asked to obtain a letter from the U.S. Fish & Wildlife Service even though there are not any endangered species present. Allamakee County said they are being required to further document a historic bridge because of claims that it has “local” significance.

Group 2

3h. County policies vary. There may be a process to get “cleared” by attending a substance abuse program. However, in general if an employee loses their CDL, they will eventually lose their job.

3i. Some engineers direct callers to the Board because the Board controls the money. Some engineers take the calls themselves because the Board does not understand the budget.

Group 4

Generally when an operator tests positive for drugs, and they are required to maintain a CDL, they have to seek help and may eventually return. Some policies do not allow for a second chance. They are simply fired. Make sure you understand the policy of your county.

Most counties try to recover damages from road user accidents if the damage exceeds a certain threshold, i.e. 100 dollars.

Try to recover from sign vandalism and illegal dumping: requires extra cooperation from the sheriff.

Try to get farmers with wide equipment to pay for bridge rail damage. Not too successful. Telspar posts are getting more popular.

Group 5

3.h. Linn County: Employees sent home but protected by the union.

Group 6

3h.

Clinton Co: No written policy; in the past if CDL is lost and is needed for job then allow person to switch with someone else to a job that doesn't require a CDL- if no one is willing to switch, then termination.

Jasper Co: All positions require CDL (mostly to meet insurance requirements); offer treatment program.

Palo Alto Co: Need CDL for all positions; old policy- either termination or keep employed with insurance but reduce pay to summer help wages; new policy- less of a reduction in pay or termination.

Woodbury Co: Offer treatment but don't return to work until treatment is complete.

Hamilton Co: Three strikes (treatment) and then you're out (termination).

3i.

Clinton Co.: General obligation bond (\$6.2 Million); let roads go to ruin; Farm Bureau meetings.

Jasper Co.: Talk about at Board meetings- the minutes are all published in the newspaper.

Woodbury Co.: Helps to talk to groups like Farm Bureau; Levy of \$0.85 per \$1000.

Delaware Co (former engineer Mark Nahra): 6.5% of property taxes goes towards roads.